

### **REMARKS**

Applicant respectfully requests reconsideration. Claims 1-20 were previously pending in this application. By this amendment, claims 1, 3, 4, 19 and 20 have been amended. No new claims have been added and no claims have been canceled. As a result, claims 1-20 are pending for examination with claims 1, 2, 19 and 20 being independent claims. No new matter has been added.

#### **Claim Objections**

The Examiner has objected to the form of claim 20. In response, claim 20 is rewritten in the manner requested.

#### **Rejections under 35 U.S.C. §112**

The Examiner has rejected claims 3, 4, and 8 under 35 U.S.C. §112 for indefiniteness. In response, the words “can be” are amended to “are selectively” or “are”.

Accordingly, withdrawal of the rejection of claims 3, 4 and 8 under 35 U.S.C. §112 is respectfully requested.

#### **Rejections Under 35 U.S.C. §103**

The Examiner rejected claims 1-20 under 35 U.S.C. §103(a) as being unpatentable over Gotz and Arend and for some claims, other prior art.

In response to the rejections, claim 1 has been amended to incorporate further method steps or acts associated with displaying filter option indicators for each attribute strip, receiving user input to filter based on the attributes and redisplaying the filtered items and associated markers. These amendments are supported at, *inter alia*, Page 2 Lines 17-27 of the application as filed. In view of the additional filtering and redisplaying limitations, claim 1 has also been amended to recite a computer implemented method of managing information, since this is considered to more accurately describe the claimed method as amended.

Claim 1 has also been amended to specify that the attributes comprise a separate list of attributes. This amendment is supported, *inter alia*, on Page 3 Line 33 – Page 4 Line 4 of the application as filed.

The amendments are made without prejudice or admission, as an expedient to advancing the application toward allowance, and it is hereby noted that the Applicant respectfully disagrees with the Examiner's rejection of the original claims. However, the discussion below refers to the claims as amended in the present submission.

In summary, the subject matter of the amended claims is not rendered obvious by the cited references at least because none of the references discloses or suggests correlating a list of items and a separate list of attributes or managing the data using filter options selected by a user and corresponding filter option indicators associated with the attributes. Further, none of the references disclose, singly or in combination, vertical strips extending beyond the column of rows and having horizontal extensions, themselves forming a column of rows.

Further, even if all of the features of the claims were disclosed individually in the cited references (which is not conceded), the Examiner has not demonstrated that a person of ordinary skill in the art, acting without the benefit of hindsight, would have had any motivation for selecting particular features from two to four totally separate documents and combining the features in the manner claimed.

The claimed method of displaying and managing information may enable a user to view attributes of the data displayed clearly and efficiently and to filter and sort the data according to its attributes, or attributes defined by the user.

The Examiner's specific objections will now be discussed in more detail.

#### Claims 1, 12-13, 15-16, 19

The amended claims are allowable over Gotz (US 2004/0034699) in view of Arend (US 2003/0229848) further in view of Sangay further in view of the Excel printout by the Examiner.

#### *Independent Claim 1*

Regarding independent claim 1, as recognized by the Examiner, Gotz fails to teach the use of markers for displaying the results of a filtering operation. Further, Gotz fails to teach the

provision of a separate list of attributes. Rather, the attributes disclosed are internal intrinsic properties of the data being filtered. In contrast, the provision of a *separate* list of attributes as claimed may enable attributes to exist and be created *independently* of the data to be filtered. Hence, for example, when user attributes are created by a user, the attributes may not be possessed by any data elements at all, until the attributes are allocated by the user. This distinction from the prior art has been emphasized by the amendment to claim 1 to specify that the list of attributes is separate from the list of items.

Further, Gotz does not disclose the feature of the vertical strips extending beyond the column of rows of items and having horizontal extensions themselves forming a column of rows. Therefore, it would not be possible for Gotz to display a filter option indicator in such horizontal extensions, nor to receive input from the user to select particular filter option indicators and filter the data based on the options selected. Indeed, as appreciated by the Examiner, Gotz does not teach the selection of a filter in any form.

Applicant disagrees with the Examiner's assertion that Arend teaches the selection of the filter. The filters in Arend require the entry of text, which is matched to items in the table. However, as set out in claim 1, the present application requires only a selection of a filter option indicator to operate the filter. Hence the filter of the present application is primarily a binary filter, so it operates in a totally different way as compared to the filter disclosed in Arend. There is no disclosure in Arend of the user selection of filter option indicators associated with particular attributes.

As appreciated by the Examiner, Arend also does not disclose the extension of the strips that is also missing from Gotz. Further, neither Sangay nor the Excel printout discloses the provision of vertical strips extending beyond the column of rows of items and having horizontal extensions themselves forming a column of rows. This arrangement may advantageously enable the filter option indicators to be displayed alongside the attribute names in a clear and easy to read configuration, for example as shown in Fig. 11 of the present application. Further, the format claimed may allow each attribute to be represented by a strip narrow enough to contain just one character, whilst enabling the full attribute name to be displayed in the horizontal extension. This arrangement is quite different than anything disclosed in the prior art documents.

It would not have been – and would not be - straightforward or obvious to implement a system such as that claimed using a spreadsheet program, as indicated by the Examiner. In particular, it is not clear, and is certainly not disclosed in the references, how macros or any other spreadsheet functionality could be used to filter based on selected attributes or enable a user to select filter options.

Hence, no combination of the cited references would have lead the skilled person to the invention claimed. Further, even if the documents could be combined to provide all of the elements in claim 1, there would be no motivation for the skilled person to select individual elements from each of four separate and unconnected documents to provide the method claimed.

In summary, the invention of amended claim 1 is not rendered obvious by the references and the rejection should be withdrawn.

*Dependent Claims 12, 13, 15 and 16*

The dependent claims are unobvious and allowable at least by virtue of being dependent on allowable claim 2. The features of the dependent claims are not discussed in detail herein. However, for the avoidance of doubt, the dependent claims are believed to add further novel and inventive features.

*Independent Claim 19*

Independent Claim 19 drawn to unobvious subject matter at least for the reasons given above in relation to Claim 1. However, for completeness, the Examiner's specific objections are discussed in more detail below.

Applicant does not accept the Examiner's conclusions that Gotz discloses the features of the claim relating to displaying the items or providing first and second separate tables relating to the filtering of items or the attributes associated with particular items. However, for conciseness, the discussion below is directed primarily to the attribute selection and filtering features of the claim.

As recognized by the Examiner, Gotz fails to teach the selection of filter flags including a positive or negative state. In fact, Gotz does not teach that “the user is allowed to set the attribute” in any way. Neither does Gotz teach storing a “flag indicating whether the attribute has been selected for filtering”. At best (and this is not conceded), as stated by the Examiner, Gotz teaches only a “flag “x” indicating if the data field exists in a database”.

Neither Gotz nor Arend teaches the provision of a rectangle “formed by the intersection of a vertical coloured strip and a horizontal item row to display a marker if the item possesses the attribute”. Hence neither document can teach “using this rectangle, where the user is allowed to set the attribute, to accept a mouse click from the user to toggle the attribute on or off for the item”. The Examiner has identified the filter button in Arend as a user-selectable rectangle, but this rectangle only enables the user to start the filtering process and does not toggle any attribute on or off for a particular item. Further, the rectangle is not formed by the intersection of a vertical coloured strip and a horizontal item row and does not display a marker indicating whether the item possesses a particular attribute.

As for claim 1 above, as appreciated by the Examiner, Arend also does not disclose the extension of the strips that is also missing from Gotz. Further, neither Sangay nor the Excel printout discloses the provision of vertical strips extending beyond the column of rows of items and having horizontal extensions themselves forming a column of rows. This arrangement may advantageously enable the filter option indicators to be displayed alongside the attribute names in a clear and easy to read configuration, as shown in Fig. 11 of the present application. Further, the format claimed may allow each attribute to be represented by a strip narrow enough to contain just one character, while enabling the full attribute name to be displayed in the horizontal extension. This arrangement is quite different from anything disclosed in the references.

Further, none of the references discloses the provision of colored strips having a horizontal portion and an associated vertical portion. The Examiner has indicated that Excel includes the functionality to color particular rows; however, there is no disclosure or suggestion of providing colored strips with both horizontal and vertical portions and no suggestion as to why this would be advantageous or beneficial. The claimed arrangement of colored strips may advantageously enable a user to more easily relate attribute markers arranged in the vertical strip

portions next to the list of items with the attribute names arranged in the horizontal strip portions, hence this arrangement is not merely a “visually appealing” routine choice of configuration.

Hence, the references do not disclose a number of key features of Claim 19. Further, there would have been no motivation for the person of ordinary skill in the art to have selected and combined the individual features that the Examiner has highlighted in each document with the benefit of hindsight and, even if these features were combined, this would not lead to the claimed invention.

In summary, the subject matter of amended Claim 19 is not rendered obvious by the references of record and the rejection of this claim should be withdrawn.

*Claims 2-11, 14, 17-18 and 20*

The amended claims are allowable over Gotz (US 2004/0034699) in view of Arend (US 2003/0229848).

*Independent Claim 2*

Firstly, independent claim 2 is novel and inventive at least for the reasons corresponding to those set out above in relation to claim 1. However, for completeness, the Examiner’s specific objections are discussed in more detail below.

The Examiner asserts that Gotz discloses in Columns 844-852 of Fig. 8 “displaying a marker in the attribute marker section of each attribute strip if the data element possesses the attribute associated with that attribute strip”. If the Examiner interprets Fig. 8 to attribute Columns 844-852 as “attribute marker sections” (and it is not conceded that this interpretation is valid), then it is clear that Gotz does not also disclose “a second section comprising a filter option indicator” for each attribute strip. Hence, Gotz does not teach or suggest “displaying the or each corresponding filter option indicator” for each attribute. Further, as the Examiner has identified, Gotz does not teach “receiving user input to select at least one filter option”.

Applicant respectfully disagrees with the Examiner’s assertion that Arend teaches receiving user input to select at least one filter option in the manner claimed in the present

application. The filters in Arend require the entry of text, which is matched to items in the table. However, as set out in claim 1, the present invention requires only a selection of a filter option indicator to operate the filter. Hence the filter of the present application is primarily a binary filter, so it operates in a totally different way from the filter disclosed in Arend. There is no disclosure in Arend of the user selection of filter option indicators associated with particular attributes; neither is there any disclosure of displaying user-selectable filter option indicators associated with attributes in a section of an attribute strip.

In summary, no combination of Gotz and Arend would lead the skilled person to the method of Claim 2 and the rejection of claim 2 should be withdrawn.

*Dependent Claims 3-11, 14 and 17-18*

The dependent claims are novel and unobvious at least by virtue of being dependent on allowable claim 2. The features of the dependent claims are not discussed in detail herein. However, for the avoidance of doubt, Applicant states that the dependent claims are believed to add further novel and unobvious features.

*Independent Claim 20*

Since independent claim 20 includes all of the steps or acts of method claim 2, it is also allowable at least for the reasons set out above with respect to claim 2, and its rejection should be withdrawn.

Accordingly, withdrawal of this rejection is respectfully requested.

Claim 19

Claim 19 is amended only to make a grammatical correction.

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- 15 -

Art Unit: 2178

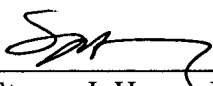
**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,  
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